

In the Remarks section below, Applicant respectfully reviews and responds to Examiner's statements in a Final Rejection Office Action from the USPTO regarding patent application 10/803,626. The response reviews the Office Action item by item and as required by the Examiner; Examiners references to Kalt and Tanaka are contrasted to Applicant's specification while Applicant's re-drafted claims are reviewed as being not obvious from prior art.

The Remarks section of this Response to the Office Action's, Claims Rejections are organized in sections A-F, each section's topic is summarized immediately below in Table of Contents – Remarks Section. Sections A-F following on subsequent pages, each section responds to specific comments made by the Examiner or to specific requirement specified by the Examiner.

Table of Contents – Remarks Section:

- A. Kalt does not describe using a series of modules as Applicant does, or describe inter-module communication at all. Instead Kalt describes how to build a single electronic module from stacked electric terminal boards.

Applicant's invention is predicated upon non-contact communication between modules.

- B. Applicant's invention's extensibility does not rely on being worked/drilled as Kalt's invention does, the extensibility of Applicant's invention and Kalt's invention rely on fundamentally Different Principals:

- C. Since Kalt does not describe a series or plurality of modules, Kalt has no series or plurality of modules to align:

- D. Kalt does not substantially disclose the claimed invention as Examiner states; Applicant's invention is significantly different from Kalt's invention in several ways not discussed in the Office Action or anywhere in Kalt:

Applicant's invention solves a different problem than Kalt (extensibility while immersed in salt water or other harsh environments) and uses methods not considered by Kalt (a plurality of modules, non-contact communications).

- E. Tanaka and Tanaka in view of Kalt do not substantially disclose Applicant's invention, and Applicant's invention is not an obvious extension of Tanaka in view of Kalt for several reasons:

Applicant's invention solves a problem that was not recognized as a problem by Kalt, Tanaka, or other prior art: Extensibility while immersed in salt water or other harsh environments.

Applicant's invention provides an unexpected result: modules that can communicate while separate are susceptible to eavesdropping where modules when connected help contain and therefore protect communication signals from eavesdropping.

Applicant's invention uses methods not considered or taught by Kalt or Tanaka: modular extensibility, & non-contact communication between modules.

- F: How newly drafted claims avoid Examiners references & distinguish from them:

Remarks:

A: Kalt does not describe or teach using a series or "a plurality" of modules as Applicant does, Kalt also does not teach or describe inter-module communication at all. Instead Kalt describes how to build stacked electric terminal boards that can be made in the form of as single electronic module:

The Examiner states that, "Kalt discloses an inter-module communication comprises a plurality of modules (14) being attached and forming an extendable structure with extendable function using a mechanism which includes a plurality of power rods (39,40,41,42) for electrically energizing and aligning the modules." (Office Action pg. 2, section 2, Par. 1);

Applicant respectfully points out the contrary, nothing in Kalt discusses connecting "a plurality of modules" or "inter-module communication" as the Examiner has stated. Nowhere in Kalt is there a discussion or teaching regarding the use of a series or plurality of modules, instead Kalt describes a single electronic module may be built from "stacked" "electric terminal boards" (see quotes below from Kalt):

Kalt Col. 1. Lines 7-8: *"This invention relates to articles of manufacture known as terminal boards, which are extensively used for the mounting of electrical circuits of all kinds."*

Kalt: Col. 1 Lines 37-40: *"The present invention is concerned with making the task of supplying additional holes a simple and inexpensive matter and with providing a stock terminal board which can be used for many applications by a minimum amount of quick and easy working, ..."*

Kalt Col. 2, Lines 50-52 (Figs. 9 & 10): *"a stacked arrangement of electric terminal boards of the invention in the form of a micro miniature electronic module;"*

Kalt in Col. 4, lines 1-6 similarly states: *"a number of such terminal boards to be conveniently structurally joined together in vertically spaced and stacked arrangements as a micro miniature electronic module and enables circuit components of the several structurally integrated terminal boards to be conveniently interconnected electrically."*

Thus Kalt states that his invention relates to "stacked" "electric terminal boards" "in the form of a micro miniature electronic module". Kalt describes how to build a single electronic module form stacked terminal boards, Kalt does not describe or teach a structure that consists of "a series of" i.e.: a plurality of modules as Applicant does.

Furthermore Kalt does not direct a claim toward a "module" or to "inter-module communication"; instead Kalt's claims and entire teaching refers to "electrical terminal board[s]" having structural limitations.

For reference, Kalt's claim 1 and Applicant's primary claims are both quoted below:

Kalt, Claim 1: "An electric terminal board, comprising a panel of electrical insulating refractory material having a multiplicity of deep holes distributed throughout its length and breadth, each of said holes extending from one broad face of said panel toward but short of the opposite broad face thereof leaving a relatively thin integral cap of said material at said other face as a closed and insulating end for said hole, said opposite broad face carrying printed circuitry thereon, the said terminal board presenting and unbroken continuity of electrical insulating material throughout substantially its entire extent."

Applicant's re-drafted primary claim: "(New) A modular electronic device, comprising: a first module including a first communication mechanism configured to facilitate transmission and reception of inter-module input/output signals without direct electrical contact; a second module including a second communication mechanism configured to facilitate transmission and reception of inter-module input/output signals with the first module without direct electrical contact; a third module including a third communication mechanism configured to facilitate transmission and reception of inter-module input/output signals with other modules without direct electrical contact; an alignment mechanism constructed to align the modules relative to one another; and an attachment mechanism constructed to retain the modules together without direct electrical contact communication of inter-module input/output signals."

Applicant's specification also describes "building robust electronic devices from a series of robust modules, ..." and discusses "inter-module communication", see quoted references below.

Applicant's Patent App. Spec. paragraph 31: "This invention is a methodology for building robust electronic devices from a series of robust modules, where function can be extended even in harsh environments: An extensible non-contact methodology where physically attached/connected electronic modules perform various functions without direct electrical contact."

Applicant's Pat. App. Spec. Par. 32, sen. 3: "This approach is scaleable from building individual consumer products to building larger scale computer systems."

Applicant's Pat. App. Spec. Par. 8: "... extensible modular electronic device where control, and/or inter-module communication are performed without direct electrical contact, by non-contact means and where modules are aligned and connected in predetermined sequences..."

Applicant respectfully points out that Applicant's specification clearly specifies an electronic device comprised of a "series", i.e.: a plurality of "modules" that use "inter-module communication" where Kalt does not.

Applicant's claims have been re-drafted to comply with Examiners objections; Please compare Applicant's re-drafted primary claim, quoted above, Applicant's quoted references, and Applicant's specification: Note that Applicant speaks of a series of modules, and describes how inter-module communication may be carried out though non-contact means.

Kalt does not describe, teach, or infer the using "a series of modules" that are attached; or discuss "inter-module communication" at all in his specification or his claims as Applicant does; instead Kalt's invention relies on "stacked" "electrical terminal boards" that are "electrically connected".

Thus Kalt does not disclose "inter-module communication comprises a plurality of modules being attached and forming an extendable structure with extendable function" as Examiner has stated

Since Kalt does not describe a series or plurality of modules and does not describe building "electronic devices from a series of robust modules, ..." or discuss "inter-module communication as Applicant has;

Kalt's invention does not teach an extendable structure with extendable function built from a series or plurality of modules as Applicant does in his invention. Applicant's invention and Kalt's invention are therefore demonstrably different.

- B. Applicant's invention's extensibility does not rely on being worked/drilled as Kalt's invention does, the extensibility of Applicant's invention and Kalt's invention rely on fundamentally Different Principals:

Applicant also respectfully points out that Kalt describes how it is often necessary to work his electric terminal boards often drilling additional holes through the material when adapting his invention to a particular situation (Kalt Col. 1 Lines 30-36 & quoted below). Kalt also explicitly states that the "concern" of his invention is "making the task of supplying additional holes a simple and inexpensive matter" (& 37-40, & also quoted below);

Kalt: Col. 1 Lines 30-36: *"Working of a terminal board often becomes necessary in order to adapt it to a particular situation. For Example, it is often necessary to drill additional holes through the material, either during original fabrication of a terminal board assembly or later in changing an existing installation."*

Kalt: Col. 1 Lines 37-40: *"The present invention is concerned with making the task of supplying additional holes a simple and inexpensive matter and with providing a stock terminal board which can be used for many applications by a minimum amount of quick and easy working, ..."*

Furthermore Kalt stresses how electrical connections between his electric terminal boards may be fashioned using solder to secure conductors in his holes; see quotes below & Kalt's specification:

Kalt: Col. 3 Lines 43-44: *"Solder 29 is used to secure the ends of the conductors in the holes 13, as shown."*

Kalt: Col 3 Lines 53-58: *"Thus, it can be seen that very precise connections can be easily made to delicate circuitry at one face of a terminal board, while requisite electrical connections of relative crudity are made at the opposite face of the board in conventional manner, as by the use of a soldering iron."*

Thus Kalt's invention uses his holes to work new electrical connections between his electrical terminal boards.

In contrast the extensibility of Applicant's invention does not rely on or provide for supplying additional holes as does Kalt by drilling. Applicant's invention also does not rely on using newly drilled holes to make new electrical interconnections.

Instead Applicant's specification describes simply the alignment and connection of modules where geometry facilitates alignment and attachment mechanisms include yet are not limited to magnetic retention; see quotes from Applicant's specification below:

Applicant's Pat. App. Spec. Par. 70, Regarding geometry and Alignment; *"A minimum of one geometric protrusion with a corresponding recess or a minimum of two pins and holes are possible implementation methods."*

Applicant's Pat. App. Spec. Par. 84 sen. 3, Application Example 1 & magnetic retention; *"A magnet inside the camera module applies a retention force..."*

Thus the extensibility of the two invention's rely on fundamentally different principals and use different expansion methods. Applicant's invention's extensibility uses "a series of robust modules", where the "modules are aligned and connected in predetermined sequences"; where Kalt describes

how to make a single electronic module form “stacked” “electrical terminal boards” that have to be worked by drilling and soldering to be expanded.

- C. Since Kalt does not describe a series or plurality of modules, Kalt has no series or plurality of modules to align:

Applicant respectfully points out that Kalt does not describe “aligning the modules” as Examiner has stated, as Kalt does not describe a series or a plurality of modules. Instead Kalt describes how to make a single electronic module form “stacked” “electrical terminal boards”.

Furthermore as discussed above in Remarks Section B, the alignment of modules in Applicant’s invention are not limited to alignment pins and holes as “a minimum on one geometric protrusion with a corresponding recess” are also described.

Kalt does not describe or teach the use of a series or plurality of modules, and he does not describe aligning modules at all.

Applicant respectfully asserts that since Kalt does not describe or teach the use of a series or plurality of modules, and does not discuss or teach alignment of modules anywhere in his text or claims, that Kalt has not defined series or plurality of modules to align as Applicant has.

- D. Kalt does not substantially disclose the claimed invention as Examiner states; Applicant’s invention is significantly different from Kalt’s invention in several ways not discussed by the Examiner in the Office Action or anywhere in Kalt:

The Examiner states in the Office Action, Detailed Action page 2, Claims Rejection section 2 par. 3: “Kalt substantially disclosed the claimed invention except for the connection between power rods and the modules in a non-electrical contact connection.”

Applicant respectfully contends that Kalt does not substantially disclose the claimed invention as the Examiner states for several reasons detailed below in the following sections:

- D.1: Applicant’s invention solves a different problem than prior art referenced by the Examiner: Applicant’s invention is extensible while immersed in salt water or other harsh environments where Kalt’s invention cannot:

Kalt describes working electric terminal boards by drilling and soldering to “adapt” his invention to a “particular situation”, yet performing this while immersed in salt water or other harsh environments is beyond the scope of Kalt; Drilling Kalt’s electric terminal boards while immersed in salt water, for example, would be extremely difficult at best. Where using a soldering iron to form new connections would be virtually impossible and utterly impractical.

Since Kalt’s invention does not solve the problem of expansion while immersed in various harsh environments where Applicant’s invention designed to be easily expandable in various harsh environments including while diving in salt water, where Kalt’s invention cannot, Applicant’s invention cannot be an obvious extension of Kalt.

- D.2: Applicant respectfully points out that in addition to the significant differences mentioned above in section A-C that differentiate Kalt’s invention from Applicant’s invention; Kalt does not use non-contact communication or non-contact control mechanisms as described in Applicant’s invention.

Applicant respectfully points out that Applicant’s reliance on using non-contact communication mechanisms in an extensible modular device that is “scaleable from building individual

consumer products to building larger scale electronic computer systems." (patent application 10/803,626 paragraph 32, sentence 2) this type of scalable functionality is not even addressed by the Examiner or by Kalt, and is another significant fundamental difference from Kalt.

Respectfully, Kalt's invention does not use or describe non-contact communication or control and does not describe using "a plurality of modules" and therefore does not substantially disclose Applicant's claimed invention as Examiner states.

D.3: Applicant's invention describes using direct power transfer and non-contact power transfer mechanisms; Applicant's invention is not limited to direct electrical connections between electric terminal boards is Kalt's invention.

The Examiner's states: "Kalt discloses an inter-module communication comprises a plurality of modules (14) being attached and forming an extendable structure with extendable function using a mechanism which includes a plurality of power rods (39,40,41,42) for electrically energizing and aligning the modules." (Office Action pg. 2, section 2, Par. 1):

Applicant respectfully point out that Kalt also does not address powering a series of modules or interconnecting modules at all. Kalt also does not describe non-contact power transfer as Applicant does.

E. Tanaka and Tanaka in view of Kalt do not substantially disclose Applicant's invention for several reasons discussed below:

E.1: Applicant respectfully contends that the use inductive non-contact power transfer is not unique, and Tanaka's use of inductive non-contact power transfer in his transport carrier is dependant upon being used in a substrate transport carrier.

The Examiner states: "Tanaka et al. teach a method of energizing an electronic device using a non-contact method (Column 14, lines 9-29)":

Yet, Tanaka himself references other electronic devices where non-contact inductive power transfer has been used in applications developed prior to his substrate transport carrier: "The method has been used as a proven method for charging electric shaver, electric brushes, and electric cars." (Tanaka Col. 14, lines 21-23). Tanaka in his Claim 30 states: "A substrate transport container according to claim 1, power to said power source is carried out by electromagnetic induction in non-contact method."

Applicant respectfully points out that Tanaka's text, and claims are directed at "substrate transport carrier" and powering a "substrate transport carrier"; not for transferring power between "a series of robust modules" that are "are aligned and connected in predetermined sequences ..." where "Control and/or inter-module communication functions are implemented in various non-contact ways, ..." (patent application 10/803,626 Specification paragraph's 8 & 10; under the Summary of Invention par. 1 & 2).

Applicant respectfully contends that the use inductive non-contact power transfer is not unique, and Tanaka's use of inductive non-contact power transfer in his transport carrier is dependant upon being used in a substrate transport carrier.

Applicant's use of non-contact power transfer is dependant on use in Applicant's modular invention that is extensible in ways that Tanaka's substrate transport carriers are not.

Furthermore Tanaka does not discuss using alignment mechanisms to increase the efficiency of non-contact power transfer as Applicant does. Applicant's use of an alignment mechanism in

such a modular system, to increase the efficiency of non-contact power transfer mechanisms is unique. See Applicant's specification par. 40.

E.2: Applicant's invention is not an obvious extension of Tanaka in View of Kalt:

Applicant's invention relies on physically connecting a series of modules where the Applicant's modules communicate by using non-contact communication between modules. Tanaka and Kalt do not describe an extensible modular device as Applicant has.

The Examiner states: "It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide a non-contact electrical connection into Kalt's device, as taught by Tanaka et al. for prevention of electrical spark."

Applicant respectfully points out that Applicant's invention is predicated on the use of inter-module non-contact communication for communicating between a series of physically connected modules. Where Tanaka does not discuss the use of non-contact communication in and extensible modular device, furthermore the Examiners response does not mention non-contact inter-module communication at all.

Instead the Examiner references Tanaka's non-contact power transfer for prevention of electrical spark. Yet provides benefits that Tanaka is not concerned with: Applicant's specification describes several other processes that degrade the effectiveness of exposed electrical contacts other than sparking, including: shorting in a highly conductive environment, crushing, fowling, wearing, and inter-metallic growth. The use of non-contact inter-module communications in Applicant's invention defeats the shortcomings of having to connect electrical communication signals directly.

Applicant respectfully asserts that Tanaka's substrate transport carrier is also not designed to be used or expanded while immersed in environments such as salt water immersion as Applicant's invention is. Tanaka's substrate transport carrier is not extensible as Applicant's invention is, as it does not relate to a series of physically connected modules that use non-contact communication.

Applicant's use of non-contact communication is a modular device also provides a non-obvious benefit. "Furthermore, depending on implementation, once connected each module's radio signals could be contained within a Faraday shield and therefore no longer broadcast into the outside environment" (Applicant's specification Par. 60). Modules that are not connected may still communicate, yet once connected inter-module communications will tend to be contained within modules increasing security against eavesdropping.

Furthermore Kalt describes the building of stacked electric terminal boards as a single electronic module, not a series or plurality of modules as Applicant does.

Kalt's electric terminal boards also require working/drilling, and soldering when adapting Kalt's electric terminal boards to a particular situation where Applicant's invention is designed to be extensible without any such working/drilling.

Applicant contends that because of these significant differences, Applicant's invention is not an obvious extension from Tanaka in view of Kalt.

F: How new claims avoid Examiner's references and distinguish from them are also reviewed, as required.

Examiner states: "It has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitation. Ex Parte Masham, 2 USPQ2d 1647 (1987)."

Applicant's claims have been re-drafted in order to overcome Examiner's Claims objections, Applicant's re-drafted claims are written in a manner that differentiates Applicant's invention from referenced prior art using language very similar to language used in Applicant's original specification.

Applicant respectfully requests that Examiner review Remarks Sections A-E and relevant prior art in light of his re-drafted claims discussed below.

Applicant contends that such a review in light of his re-drafted claims will demonstrate that Applicant's invention is significantly different from reference prior art in several significant ways.

Claims Review, Significant Differences between Applicant's invention and referenced prior art:

1. How Applicant's Re-Drafted primary claim is structurally different from referenced prior art :

Applicant's re-drafted primary claim:

Claim 13: "(New) A modular electronic device, comprising: a first module including a first communication mechanism configured to facilitate transmission and reception of inter-module input/output signals without direct electrical contact; a second module including a second communication mechanism configured to facilitate transmission and reception of inter-module input/output signals with the first module without direct electrical contact; a third module including a third communication mechanism configured to facilitate transmission and reception of inter-module input/output signals with other modules without direct electrical contact; an alignment mechanism constructed to align the modules relative to one another; and an attachment mechanism constructed to retain the modules together without direct electrical contact communication of inter-module input/output signals."

As shown in Remarks Section A above and in Applicant's re-drafted primary claim, One significant difference between Kalt and Applicant's invention is that Applicant's invention relies on a series of modules where Kalt's invention does not discuss, teach, or use a series of modules at all. Instead Kalt describes how to build stacked electric terminal boards.

Applicant Respectfully contends that references in Remarks Section B demonstrate that another significant difference between Kalt and Applicant's invention relates to how the two inventions are expanded: As shown in Remarks Section B, Kalt's extensibility relies on working/drilling electric terminal boards where Applicant's invention's extensibility does not.

Since references to Kalt in Remarks Section B and a general reading of Kalt clearly show that Kalt's invention's extensibility requires working/drilling, and even soldering new electrical connections, then: A second significant difference between Kalt and Applicant's invention is that Applicant's invention does not require working/drilling, and soldering as does Kalt's invention.

Instead Applicant states in his specification describes: "*A minimum of one geometric protrusion with a corresponding recess or a minimum of two pins and holes are possible implementation methods.*" Applicant's Pat. App. Spec. Par. 70.

Applicant also discusses using magnets, as one possible alternative method used to retain modules: Pat. App. Spec. Par. 84 sen. 3, Application Example 1 & magnetic retention; "A magnet inside the camera module applies a retention force..."

Thus Applicant's invention's extensibility relies on fundamentally different principals than Kalt's electric terminal boards or Tanaka's substrate transport carriers:

- a. Applicant's invention relates to a modular electronic device using modules that are designed to be connected in pre-determined sequences (as specified in the Applicants Re-Drafted primary claim), and where new functionality is added by aligning and connecting another module. Each module is designed to perform a function that it is designed to perform, and each module is aligned and connected in locations that are pre-determined. Kalt or Tanaka discuss nothing of the kind.
- b. Applicant's modules are designed to align and connect without working/drilling, creating new through-passages, or by soldering new connections, yet Kalt's extensibility does rely on these.
- c. Applicant's extensibility is not limited to pins and holes, as applicant has described how one geometric protrusion with a corresponding recess may be used to align modules, and how magnets may be used to connect modules, where Kalt does not describe these mechanisms at all.

Thus Applicant's re-drafted primary claim quoted above describes a structure that relies on physically connecting a series of modules in predetermined sequences where the modules use non-contact communication; Kalt or Tanaka do not describe or teach the use of a series of modules at all.

2. Applicant's Other re-drafted claims are all dependant claims, numbered 14-27; relate to various aspects contained in applicant's original specification.

Since Kalt & Tanaka do not describe a series or plurality of modules as Applicant does they do not describe attaching or aligning modules as Applicant does. See Applicant's specification & response sections A-E above:

14. (New) A device as in claim 13 wherein the attachment mechanism is constructed to rigidly retain the modules together.
15. (New) A device as in claim 13 wherein the alignment mechanism is constructed to align and rigidly hold the modules together.

Applicant describes how sealed modules used in combination with non-contact communication enable electronic devices to be extensible while immersed in salt water or other harsh environments where Kalt or Tanaka's inventions cannot.

16. (New) A device as in claim 13 wherein each of the modules is encapsulated and sealed from the environment.

Applicant describes how magnets can be used to connect and hold modules together, Applicant in his Fig 5 also shows magnets as embodied in new claims 17 & 18 below, where Kalt or Tanaka do not. See also response section B above Applicant's Pat. App. Spec. Par. 84 sen. 3.

17. (New) A device as in claim 13 wherein the attachment mechanism comprises a magnet coupled to each of the first module and the second module.
18. (New) A device as in claim 17 wherein the attachment mechanism comprises a metallic protrusion on the first module and an aperture comprising magnets in the second module.

Applicant also describes how non-contact control mechanisms can be used with his extensible device. See response section A above and Applicant's Pat. App. Spec. Par. 8.

19. (New) A device as in claim 13, further comprising one or more non-contact, without direct electrical contact control mechanisms.

As reviewed in response section E above, Applicant describes non-contact power distribution between modules, that includes yet is not limited to induction; Tanaka uses non-contact inductive power transfer in his substrate transport carrier yet Tanaka describes how other electronic devices also use inductive power transfer. Applicant's use of non-contact power transfer is limited to use in his modular extensible device.

20. (New) A device as in claim 13, further comprising one or more non-contact inter-module power transfer mechanisms.

Applicant describes in his specification how alignment mechanisms may be used to improve the efficiency of non-contact power and communication mechanisms Kalt or Tanaka do not use alignment mechanisms to transfer communication I/O signals or power. See Applicant's specification par. 40, 58, & 73.

21. (New) A device as in claim 20, further comprising one or more alignment mechanisms that improve the efficiency of the non-contact power transfer mechanisms.
22. (New) A device as in claim 13, further comprising one or more alignment mechanisms that improve the efficiency of the inter-module communication mechanisms configured to facilitate transmission and reception of inter-module input/output signals with one or more other modules without direct electrical contact;

Applicant describes in his specification "Furthermore, depending on implementation, once connected each module's radio signals could be contained within a Faraday shield and therefore no longer broadcast into the outside environment" (Applicant's specification Par. 60).

23. (New) A device as in claim 13 where modules contain non-contact communication I/O signals when modules are connected yet broadcast non-contact communication I/O signals when separate.

Applicant's modules may be liquid filled where Kalt and Tanaka do not describe using liquids at all.

24. (New) A device as in claim 16 where the modules are liquid filled for cooling.

25. (New) A device as in claim 16 where the modules are liquid filled for withstanding a high pressure environment.

Applicant's invention is extensible where Kalt and Tanaka are not extensible as Applicant's describes in his Application & in response sections A-E above.

26. (New) A device as in claim 13 where the modules further comprising a plurality of communication mechanisms configured to facilitate transmission and reception of inter-module input/output signals without direct electrical contact.

27. (New) A device as in claim 13 further comprising a plurality of additional modules, each including one or more communication mechanisms configured to facilitate transmission and reception of inter-module input/output signals without direct electrical contact.

Applicant's invention is extensible where Kalt and Tanaka are not extensible as Applicant's describes in his Application & in response sections A-E above.

As reviewed above the inventions of Kalt and Tanaka rely on fundamentally different principals, have a different intent, and use different methods from Applicant's invention.